

# Zehui Mao

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3922828/publications.pdf>

Version: 2024-02-01

79  
papers

1,341  
citations

394421

19  
h-index

361022

35  
g-index

79  
all docs

79  
docs citations

79  
times ranked

1223  
citing authors

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 1  | \$H_{\infty}\$-Filter Design for a Class of Networked Control Systems Via Tâ€“S Fuzzy-Model Approach. IEEE Transactions on Fuzzy Systems, 2010, 18, 201-208.                                | 9.8 | 158       |
| 2  | Deep PCA Based Real-Time Incipient Fault Detection and Diagnosis Methodology for Electrical Drive in High-Speed Trains. IEEE Transactions on Vehicular Technology, 2018, 67, 4819-4830.     | 6.3 | 137       |
| 3  | Adaptive Fault-Tolerant Sliding-Mode Control for High-Speed Trains With Actuator Faults and Uncertainties. IEEE Transactions on Intelligent Transportation Systems, 2020, 21, 2449-2460.    | 8.0 | 77        |
| 4  | Sliding mode observer based incipient sensor fault detection with application to high-speed railway traction device. ISA Transactions, 2016, 63, 49-59.                                     | 5.7 | 76        |
| 5  | Protocol and Fault Detection Design for Nonlinear Networked Control Systems. IEEE Transactions on Circuits and Systems II: Express Briefs, 2009, 56, 255-259.                               | 3.0 | 72        |
| 6  | Sliding Mode Observer-Based Fault Estimation for Nonlinear Networked Control Systems. Circuits, Systems, and Signal Processing, 2011, 30, 1-16.   | 2.0 | 67        |
| 7  | Incipient Fault Detection for Traction Motors of High-Speed Railways Using an Interval Sliding Mode Observer. IEEE Transactions on Intelligent Transportation Systems, 2019, 20, 2703-2714. | 8.0 | 65        |
| 8  | Sensor Fault Detection for Rail Vehicle Suspension Systems With Disturbances and Stochastic Noises. IEEE Transactions on Vehicular Technology, 2017, 66, 4691-4705.                         | 6.3 | 64        |
| 9  | Observer-based fault-tolerant control for a class of networked control systems with transfer delays. Journal of the Franklin Institute, 2011, 348, 763-776.                                 | 3.4 | 54        |
| 10 | Adaptive Compensation of Traction System Actuator Failures for High-Speed Trains. IEEE Transactions on Intelligent Transportation Systems, 2017, 18, 2950-2963.                             | 8.0 | 49        |
| 11 | Incipient Voltage Sensor Fault Isolation for Rectifier in Railway Electrical Traction Systems. IEEE Transactions on Industrial Electronics, 2017, 64, 6763-6774.                            | 7.9 | 46        |
| 12 | Robust decentralised load frequency control for interconnected time delay power systems using sliding mode techniques. IET Control Theory and Applications, 2020, 14, 470-480.              | 2.1 | 38        |
| 13 | Adaptive Backstepping Based Fault-tolerant Control for High-speed Trains with Actuator Faults. International Journal of Control, Automation and Systems, 2019, 17, 1408-1420.               | 2.7 | 37        |
| 14 | Adaptive Actuator Compensation of Position Tracking for High-Speed Trains With Disturbances. IEEE Transactions on Vehicular Technology, 2018, 67, 5706-5717.                                | 6.3 | 33        |
| 15 | Incipient Fault Diagnosis for High-Speed Train Traction Systems via Stacked Generalization. IEEE Transactions on Cybernetics, 2022, 52, 7624-7633.  | 9.5 | 32        |
| 16 | A fault-tolerant control framework for a class of non-linear networked control systems. International Journal of Systems Science, 2009, 40, 449-460.  | 5.5 | 28        |
| 17 | Fault-Tolerant Control for Systems With Unmatched Actuator Faults and Disturbances. IEEE Transactions on Automatic Control, 2021, 66, 1725-1732.  | 5.7 | 28        |
| 18 | Generalized Regular Form Based SMC for Nonlinear Systems With Application to a WMR. IEEE Transactions on Industrial Electronics, 2017, 64, 6714-6723.                                       | 7.9 | 27        |

| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 19 | Adaptive Control Design and Evaluation for Multibody High-Speed Train Dynamic Models. IEEE Transactions on Control Systems Technology, 2021, 29, 1061-1074.  | 5.2 | 20        |
| 20 | Fault Detection for a Class of Nonlinear Networked Control Systems with Markov Transfer Delays and Stochastic Packet Drops. Circuits, Systems, and Signal Processing, 2015, 34, 1211-1231.         | 2.0 | 18        |
| 21 | Fault diagnosis for a class of active suspension systems with dynamic actuators's faults. International Journal of Control, Automation and Systems, 2016, 14, 1160-1172.                           | 2.7 | 18        |
| 22 | Incipient sensor fault estimation and accommodation for inverter devices in electric railway traction systems. International Journal of Adaptive Control and Signal Processing, 2017, 31, 785-804. | 4.1 | 18        |
| 23 | Fault Detection for a Class of Nonlinear Networked Control Systems with Communication Constraints. International Journal of Control, Automation and Systems, 2018, 16, 256-264.                    | 2.7 | 17        |
| 24 | Fault Detection for A Class of Closed-loop Hypersonic Vehicle System via Hypothesis Test Method. International Journal of Control, Automation and Systems, 2021, 19, 350-362.                      | 2.7 | 13        |
| 25 | Fault detection for a class of nonlinear networked control systems. International Journal of Adaptive Control and Signal Processing, 2010, 24, 610-622.  | 4.1 | 12        |
| 26 | Sliding mode control for a class of nonlinear systems with application to a wheeled mobile robot. , 2015, , .  |     | 11        |
| 27 | Modelling and fault tolerant control for near space vehicles with vertical tail loss. IET Control Theory and Applications, 2014, 8, 718-727.   | 2.1 | 9         |
| 28 | Fault Accommodation For a Class of Nonlinear Flight Control Systems. , 0, , .  |     | 8         |
| 29 | Adaptive robust fault-tolerant control for linear MIMO systems with unmatched uncertainties. International Journal of Control, 2017, 90, 2253-2269.  | 1.9 | 8         |
| 30 | Adaptive Sliding Mode Observer for Nonlinear Interconnected Systems with Time Varying Parameters. Asian Journal of Control, 2019, 21, 405-414.   | 3.0 | 8         |
| 31 | Distributed Adaptive Fault-Tolerant Formation Control for Heterogeneous Multiagent Systems With Communication Link Faults. IEEE Transactions on Aerospace and Electronic Systems, 2022, , 1-11.    | 4.7 | 7         |
| 32 | High gain observer-based fault estimation for nonlinear networked control systems. , 2008, , .   |     | 6         |
| 33 | Data-based incipient actuator fault detection and diagnosis for three-phase PWM voltage source inverter. , 2016, , .   |     | 6         |
| 34 | Fault-Tolerant Formation Tracking Control for Heterogeneous Multiagent Systems with Directed Topology. Research on World Agricultural Economy, 2021, 01, 2150001.                                  | 1.3 | 6         |
| 35 | Adaptive Observer Design for a Class of Nonlinear Interconnected Systems with Uncertain Time Varying Parameters. IFAC-PapersOnLine, 2017, 50, 1421-1426.   | 0.9 | 5         |
| 36 | Adaptive observer design for nonlinear interconnected systems by the application of LaSalle's theorem. International Journal of Adaptive Control and Signal Processing, 2020, 34, 1559-1571.       | 4.1 | 5         |

| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 37 | Decentralised state feedback stabilisation for nonlinear interconnected systems using sliding mode control*. International Journal of Systems Science, 2022, 53, 1017-1030.  | 5.5 | 5         |
| 38 | Fault-tolerant control design for a kind of nonlinear networked control system with communication constraints. , 2009, , .   |     | 4         |
| 39 | Observer-based Reliable Control for Discrete Time Systems: An Average Dwell Time Approach. Asian Journal of Control, 2012, 14, 1625-1633.  | 3.0 | 4         |
| 40 | Trajectory tracking control of a two-wheeled mobile robot using sliding mode techniques. , 2015, , .   |     | 4         |
| 41 | Fault-tolerant Control for MIMO Networked Control Systems with Uncertainties. , 2006, , .  |     | 3         |
| 42 | Discrete wavelet transform based data trend prediction for marine diesel engine. , 2017, , .   |     | 3         |
| 43 | Observer based fault estimation for inverter devices of traction systems with disturbance. , 2017, , .   |     | 3         |
| 44 | EEMD based incipient fault diagnosis for sensors faults in high-speed train traction systems. , 2017, , .  |     | 3         |
| 45 | Cooperative fault estimation for a class of heterogeneous multi-agents with stochastic nonlinearities based on finite impulse response filter. International Journal of Robust and Nonlinear Control, 2022, 32, 4696-4715. | 3.7 | 3         |
| 46 | Adaptive backstepping fault tolerant control for near space vehicles. , 2014, , .  |     | 2         |
| 47 | Multiple-model Based fault diagnosis for actuators of rail vehicle suspension. , 2015, , .   |     | 2         |
| 48 | Decentralised sliding mode control for nonlinear interconnected systems in the regular form. , 2016, , .   |     | 2         |
| 49 | Decentralized Sliding Mode LFC for Nonlinear Interconnected Power System with Time Delay. , 2018, , .  |     | 2         |
| 50 | A novel unknown input observer-based fault detection with application to a two-stage chemical reactor. International Journal of Adaptive Control and Signal Processing, 2021, 35, 1789-1804.                               | 4.1 | 2         |
| 51 | Actuator fault detection for the discrete-time switched systems based on delta operator approach. Optimal Control Applications and Methods, 2022, 43, 476-494.   | 2.1 | 2         |
| 52 | Resilient Tracking Control for Unmanned Helicopter Under Variable Disturbance and Input Perturbation. International Journal of Control, Automation and Systems, 2022, 20, 147-159.   | 2.7 | 2         |
| 53 | Observer-based fault detection for Rail Vehicle Suspension Systems. , 2014, , .  |     | 1         |
| 54 | Variable structure observer for a class of nonlinear large-scale interconnected systems with uncertainties. , 2016, , .  |     | 1         |

| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 55 | Adaptive position tracking control of high-speed trains with piecewise dynamics. , 2017, , .   |     | 1         |
| 56 | Decentralised Sliding Mode Control for Nonlinear Interconnected Systems in the Generalised Regular Form. IFAC-PapersOnLine, 2017, 50, 8850-8855.   | 0.9 | 1         |
| 57 | Adaptive Position Tracking Compensation for High-Speed Trains with Actuator Failures * **This work was supported in part by the National Natural Science Foundation of China under Grant 61490703, Grant 61573180 and Grant 61374130.. IFAC-PapersOnLine, 2017, 50, 14266-14271.   | 0.9 | 1         |
| 58 | Observer Based Fault Estimation for Induction Motor with Stator Inter-turn Short Circuit Faults and Disturbances. , 2019, , .  |     | 1         |
| 59 | Zero dynamics analysis and adaptive tracking control of underactuated multibody systems with flexible links. International Journal of Control, 2021, 94, 1931-1943.  | 1.9 | 1         |
| 60 | Decentralised Sliding Mode Tracking Control for a Class of Nonlinear Interconnected Systems**This work was supported by the National Natural Science Foundation of China under Grants 61922042 and 62020106003, China Scholarship Council for 3 years' study at the University of Kent, and Qing Lan Project., , 2021, , . |     | 1         |
| 61 | Fault-Tolerant Control for Spacecraft under Actuator Fault via Zero-Sum Differential Game Theory. , 2021, , .  |     | 1         |
| 62 | TD-GAT: Graph Neural Network for Fault Diagnosis Knowledge Graph. , 2021, , .  |     | 1         |
| 63 | Construction and Reasoning Method of Fault Knowledge Graph with application of Engineering Machinery. , 2021, , .  |     | 1         |
| 64 | Spacecraft attitude tracking control based on MPC and fractional-order sliding mode control. , 2022, , .   |     | 1         |
| 65 | Fault Detection for Networked Control Systems with Time delays Based on Unknown Input Observer. , 2007, , .  |     | 0         |
| 66 | H <sub>∞</sub> filter design for a class of networked control systems via T-S fuzzy model approach. , 2010, , .  |     | 0         |
| 67 | Fault detection for a class of nonlinear networked control systems with transferred delays. , 2013, , .  |     | 0         |
| 68 | Fault detection for a class of stochastic systems with unknown disturbance. , 2015, , .  |     | 0         |
| 69 | Normal form and adaptive control of mimo non-canonical neural network systems. , 2016, , .   |     | 0         |
| 70 | Observer based fault diagnosis for induction motor with sensor faults and disturbances. , 2017, , .  |     | 0         |
| 71 | State and Parameter Estimation for a Class of Nonlinearly Parameterized Systems Using Sliding Mode Techniques. , 2018, , .   |     | 0         |
| 72 | Fault Diagnosis for Stator Inter-turn Short Circuit Fault of Traction Motors under Closed-loop Structure. , 2019, , .  |     | 0         |

| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 73 | Research on Fault Estimation and Fault-tolerant Control of Hypersonic Aircraft Based on Adaptive Observer. , 2019, , .   |     | 0         |
| 74 | Fault Isolation Via Multiple-model Estimation for Traction Inverter with IGBT Open Circuit Fault. , 2019, , .  |     | 0         |
| 75 | Actuator fault detection for a two-stage chemical reactor based on the functional observer approach. Canadian Journal of Chemical Engineering, 2022, 100, 800-810. | 1.7 | 0         |
| 76 | Life Prediction of Rolling Bearing using Temporal Convolution Network and Attention Mechanism. , 2021, , .   |     | 0         |
| 77 | Decentralized Sliding Mode Control for Output Tracking of Large-Scale Interconnected Systems. , 2021, , .  |     | 0         |
| 78 | Fault Diagnosis based on Domain Adaptive Multi-task learning Convolutional Neural Network. , 2021, , .   |     | 0         |
| 79 | Fault-tolerant Formation for Multi-UAV via Improved Artificial Potential Field Method. , 2021, , .   |     | 0         |